PROJECT MANGEMENT PLAN EXAMPLES

Identify and Evaluate Alternatives and End-Points Examples

Example 31

3.01 Deactivation Alternatives Evaluation Summary

There are four alternatives for deactivation of the 400-D excess facilities:

1. Shut down systems and turn over the facilities "as-is"
2. Prepare the facility for an alternate use
3. Proceed immediately with final decommissioning
4. Place the facility into a passively safe, minimal S&M condition

Option 1 was not chosen due to (1) An increased level of risk, primarily associated with maintaining and controlling the heavy water inventory and (2) The high cost of maintaining the facilities as-is. Option 2 was rejected because no alternative use for these facilities has been identified. Finally, no funding has been identified which would support final decommissioning, option 3.

3.02 Identification of Receiving Organization

FDD will become the custodial organization for the 400-D excess facilities as previously detailed. The 711-1D and 717-D buildings within the D-TA will remain under the custodianship of A&ID.

3.03 Results of End Use Decision

No alternative use for the facility has been identified. There is no funding for decommissioning the facility. Consequently, the facility will be placed into long term surveillance and maintenance condition.

Example 32

3.0 Post deactivation end state vision

3.01 Deactivation Alternative Evaluation Summary

Four possible alternatives for disposition of the 322-M Metallurgical Laboratory were evaluated:

1. Continue the current surveillance and maintenance practice.
2. Clean out the facility to prepare it for alternate use.
3. Deactivate the facility into a passively safe, minimum surveillance and maintenance condition.
4. Proceed immediately with final decommissioning.

Option 2 was not considered viable since no alternative use has been identified for the facility. Since the funds necessary to go directly to final decommissioning are not currently available, and not likely to be available in the near future, Option 4 was also not considered viable.

Option 3 was selected is the best choice because it will permanently reduce the cost of caring for the facility (the "mortgage") while stabilizing the residual hazards. Though the current cost of choosing Option 1 is approximately $10,000 per year for S&M it is anticipated that over time this cost will significantly increase as the structure degrades and repairs are necessary (e.g. roof replacement to address water infiltration).

The cost to decommission (or further deactivate) the facility will also increase over time as the facility degrades (e.g. the molding and disintegration of ceiling tiles). This type of degradation will significantly increase the difficulty of performing work activities in the facility. Finally, it is essential that the hazards within all excess facilities and the potential pathways out of those facilities be addressed to prevent migration of these hazards into the environment.

3.02 Results of Decision to Disposition per MP 5.24

The selected disposition alternative will deactivate the 322-M facility, placing it into a low cost, safe, stable and passive condition for surveillance and maintenance over an extended period of time. The deactivation strategy for the facility is to isolate or fix in-place all transferable radioactive contamination, including material in hold-up. All possible pathways for the migration of contamination out of the facility into the environment will be sealed.

Any equipment remaining in the facility with no identified re-use or salvage value will be retired in-place (i.e., abandoned) without being decontaminated. The facility will be locked and de-energized completely, including the shutdown of all ventilation. All utilities will be isolated external to the facility, placing the facility into a "cold and dark" state.

In addition, FDD is promoting the use of Dismantlement and Removal (D&R) Services subcontracts to reduce the life cycle cost of excess facilities, systems, components and equipment. Under a D&R Services subcontract, the subcontracted company would dismantle and remove items with salvage or re-use value at little or no cost to the government. They would recover their cost of D&R by selling the items in the open market. A potential use of a D&R subcontract for 322-M could be the D&R of the stainless steel exhaust process vent duct system for the building. This subcontracting strategy has not been incorporated into the 322-M Deactivation Project Plan for three reasons. First, there is no deactivation end point that requires removal of the external duct systems. Second, removal of systems and equipment is a final decommissioning activity. And third, since the D&R process is just being initiated at SRS, there is little practical experience upon which to judge its success. If a D&R Services subcontract is awarded for 322-M, the work will be incremental to the scope of the deactivation plan.

Surveillance and maintenance will consist of an annual inspection to ensure that the facility remains in a safe, stable and passive condition, and that the intrusion of rainwater, animals and unauthorized persons is precluded. The annual inspection will be repeated if deemed necessary as the result of a severe natural event such as earthquake, hurricane, or tornado.

3.03 Identify Receiving Organization

FDD is currently and will continue to be the custodial organization for the 322-M Metallurgical Laboratory as it passes through all the five phases of the Excess Facility Disposition Process as delineated in MP 5.24*, Excess Facility Disposition* and as required by S/RID FA15, *Decontamination and Decommissioning* . This not only includes custodianship but responsibility for the planning, funding and execution of those tasks required to place the facility in a safe and stable end state. Upon completion of the deactivation initiatives as delineated in this plan, contacts will be established within DOE EM-40 to transfer the facility for eventual decommissioning.

Example 33

3. Alternative Analysis and Selection

Several alternatives were considered for the near-term management of the 771/774 Closure Project. The preamble to RFCA and the Rocky Flats vision statement both contain the objective that buildings will be decontaminated as required for future use or demolition. The evaluation of the scope of work for the 771/774 Closure Project considered the following three alternatives:

- Alternative 1 - Decontamination/Decommissioning of the 7711774 Closure Project facilities
- Alternative 2 - No Action with Safe Shutdown Maintenance
- Alternative 3 - Reuse of the 7711774 Closure Project facilities

The alternatives were evaluated for effectiveness, implementability and relative costs. The results of the alternative analysis are summarized in Table 3-1. Alternative 1 is the selected alternative.

Decontamination and decommissioning of the 771/774 Closure Project facilities clearly supports the RFETS vision of safe, accelerated and cost-effective closure. This alternative has the lowest life-cycle costs, the fastest risk reduction and is integrated with the operations of the site. This alternative also maintains long-term protection of public health and the environment Short-term impacts to the environment (i.e., impacts during the duration of the action) can be physically and administratively controlled. There are no significant negative aspects to decontamination and decommissioning of the clusters at this time. A full discussion of the impacts is provided in Section 8.

Alternative 2, No Action with Safe Shutdown Maintenance, does not immediately achieve RFETS goals. This alternative does not accomplish accelerated closure and defers decontamination and decommissioning. This results in an increase in the life-cycle cost of closure. The short-term protection of public health and the environment is achieved by inaction. However, this protection decreases over time due to continued degradation of systems and equipment through aging. Furthermore, waste and debris requiring treatment and/or disposal, and the risks associated with managing them, are not eliminated from the cluster under this alternative.

Alternative 3, Reuse, is not feasible as evidenced in evaluations that indicated that reuse of the 7711774 Closure Project facilities is neither required nor beneficial. Furthermore, as with Alterative 2, implementation of this action will result in the deferral not elimination of eventual decontamination and decommissioning necessary for final closure.

Table 3-1 Alternative Analysis Summary

Alternative	Description	Effectiveness	Implementation Feasibility	Relative Cost
1 – D&D	Decontamination and Decommissioning (D&D) activities will follow area-specific	D&D is effective in achieving the long-term goals of the RFCA preamble	Technology currently exists to achieve the objectives of this	Immediate D&D has the lowest life-cycle costs since the cluster must eventually incur these

	plans approved in accordance with RFCA. Activities consist of decontamination as deemed necessary, and decommissioning to include dismantlement and demolition.	and the Rocky Flats Vision. The mortgage costs are eliminated and the risks and hazards are significantly reduced.	alternative. Integration with other site activities can be accomplished.	costs as part of its baseline. Immediate closure achieves minimal landlord and D&D costs.
2 – No Action	No action will maintain the 771/774 Closure Project in its current configuration. No additional equipment would be removed unless the present safe shutdown status of the cluster becomes compromised.	No Action delays the closure activities that must eventually be performed to meet the goals of RFCA. Deferring the closure could make funding available to other site closure activities. Long term goals could be jeopardized if the integrity of the mothballed facilities increases risk to works and the environment.	No Action would cause a disruption to the long-term plans for RFETS and is not ideally implemental since the closure of the cluster is planned to occur early in the site closure process.	No Action results in higher costs than immediate D&D since landlord costs would continue to be incurred until D&D is eventually completed. These costs are estimated at $5 million per year for the period of the building stands inactive. D&D costs (adjusted for future value) would still be required.
3 – Reuse	Reuse of the 771/774 Cluster would keep the facilities in their current configuration. A new mission for the facilities, in support of the present site Cleanup Mission, would be assigned by the site Utilization Review Board. Depending on the nature of the new mission, additional removal of equipment may be necessary. The current utilities and equipment would be maintained until a new mission was defined.	Reuse of the 771/774 Closure Project was evaluated by the Sites Facility Use Committee and it was determined that there was no further mission for the cluster. Use of the cluster for an alternative off-site use was evaluated in accordance with DOE Order 4300/.1C, Subparagraph g, Disposal of Government-Owned Land Improvements. No further use was identified.	Because no new mission has been identified for the cluster and because the closure of the cluster is identified through the Life-Cycle baseline to begin soon, implementation of this alternative is not considered administratively feasible.	This alternative would result in the greatest life-cycle costs as the reuse mission would more than likely require expenditures for modifications to the buildings in addition to existing landlord/surveillance costs. Furthermore, D&D costs (adjusted for future value) would still be required.